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Re-evaluation Note

REV2017-04

Special Review Decision: Chloropicrin

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Special Review Decision

Pursuant to subsection 17(2) of the *Pest Control Products Act*, the Pest Management Regulatory Agency (PMRA) conducted a special review of pest control products containing chloropicrin based on the decision taken by the European Commission in 2011 to prohibit all uses of chloropicrin due to health and environmental concerns. The PMRA evaluated the aspects of concern that prompted the special review in accordance with subsection 18(4) of the *Pest Control Products Act*. The proposed special review decision was published for consultation in the Re-evaluation Note REV2016-10, *Special Review of Chloropicrin: Proposed Decision for Consultation*, and it outlines the Agency's proposed decision and the reasons for it.

Comments received during the consultation process were taken into consideration in making this final special review decision, and they did not result in changes to the proposed regulatory decision as described in REV2016-10. Therefore, the PMRA, under the authority of the *Pest Control Products Act*, is confirming the current registration of pest control products containing chloropicrin in Canada. Appendix I summarizes the comments received and provides the PMRA's response to these comments.

Regulatory Directive DIR2014-01, *Approach to Special Reviews*, presents the details of the PMRA's special review approach.

Other Information

Any person may file a notice of objection¹ regarding this decision on chloropicrin within 60 days from the date of publication of this special review decision. For more information regarding the basis for objecting (which must be based on scientific grounds), please refer to the Pesticides and Pest Management portion of Health Canada's website, Request a Reconsideration of Decision, or contact the PMRA's Pest Management Information Service.

¹ As per subsection 35(1) of the *Pest Control Products Act*.

Appendix I Comments and Responses

The PMRA received comments from stakeholders in response to Re-evaluation Note REV2016-10, *Special Review of Chloropicrin: Proposed Decision for Consultation*. The PMRA consolidated and summarized the comments related to this special review and provides responses below.

1.0 Scope of the Special Review of Chloropicrin

1.1 Comment on the Aspect of Concern for the Special Review

Despite chloropicrin's very high acute toxicity, the special review proposes continued registration based on risk management measures provided to protect handlers. The special review does not consider risk to bystanders, nearby communities or residents during soil fumigation and off gassing from treated fields; or exposure to workers handling treated poles and timber.

PMRA Response:

When a special review is initiated under subsection 17(2), the PMRA carries out an analysis of the OECD member country decision to identify the aspect(s) of concern related to the pest control products. For chloropicrin, the health aspect of concern identified in the European decision pertained to 'operator exposure' which represents handlers who mix/load/apply chloropicrin. As described in Regulatory Directive DIR2014-01, *Approach to Special Reviews*, the PMRA special review evaluation is targeted to address only the aspect(s) of concern related to the pest control product that prompted the special review. As described in REV2016-10, risk to handlers of both soil fumigant and wood treatment uses of chloropicrin were not of concern with the existing conditions of use.

The PMRA has previously implemented extensive additional mitigation measures to protect bystanders and nearby residents as well as workers using chloropicrin as a wood treatment. Refer to REV2012-09, *Label Amendments for Soil Fumigants Products Containing Chloropicrin* and REV2012-07, *Chloropicrin, Dazomet, Metam Sodium and Metam Potassium Label Improvements for Antimicrobial Products* for more information.

2.0 Science Evaluation

2.1 Comment on Risks to Birds and Mammals

Chloropicrin is highly to very highly toxic to aquatic organisms according to the USEPA, and poses a potential risk if inhaled by mammals and birds due to off gassing and use as a soil fumigant. The special review dismisses these risks as not of concern despite finding that "inhalation risks from potential repeated (subchronic or chronic) exposure slightly exceeded the level of concern." In addition, PMRA's risk assessment for mammals and birds is based on one application per year; however, the product labels do not restrict the frequency of use to once a year.

PMRA Response:

Chloropicrin is typically applied once per year as a soil fumigant. Fumigation occurs in the early spring or late fall either before the crop is planted or after the crop season. In limited cases, fields may be fumigated in both the spring and fall. When chloropicrin is applied it is injected into the soil and the soil is sealed to prevent release.

As described in REV2016-10, there is potential risk to birds and mammals through inhalation of chloropicrin off-gassing from fumigated fields at subchronic and chronic durations. However, based on one or two fumigations per year and the rapid degradation/dissipation through the atmosphere, continuous subchronic and chronic exposure to birds and mammals is expected to be minimal and is not of concern. Potential exposure to birds and mammals following chloropicrin fumigation is expected to be of an acute duration which was not of concern. The PMRA implemented extensive risk reduction measures in 2014 to minimize the release of chloropicrin emissions from treated fields. The measures include restrictions regarding site conditions and practices that must be followed before or during application. These measures further minimize potential exposures and risks to birds and mammals.

References

Published Information

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Unpublished Information

PMRA Document Number	Reference
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